

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for sampling a non-aqueous liquid comprising:
a water sensor capable of being coupled to a non-aqueous liquid to sense an indication of the water content of the non-aqueous liquid; ~~and~~
an optical particle counter capable of being coupled to the non-aqueous liquid to provide an indication of the number of particulates present in the non-aqueous liquid ; and
a processing circuit operatively coupled to at least one of the water sensor and the optical particle counter, wherein the processing circuit signals implications of the water content on the particle count.
2. (Original) The system of claim 1 wherein the water sensor and the optical particle counter are disposed in a slipstream of the non-aqueous liquid.
3. (Previously Presented) The system of claim 1 wherein the water sensor is disposed downstream of the optical particle counter.
4. (Previously Presented) The system of claim 1 wherein the water sensor is disposed upstream of the optical particle counter.
5. (Previously Presented) The system of claim 1 wherein the water sensor and the optical particle counter are disposed in parallel in the non-aqueous liquid.
6. (Previously Presented) The system of claim 1 wherein the water sensor generates a signal indicative of relative saturation water content.
7. (Previously Presented) The system of claim 1 wherein the water sensor generates a signal indicative of absolute water content.
- Claims 8 and 9: Cancelled
10. (Previously Presented) The system of claim 1 wherein the optical particle counter generates a signal indicative of the number of particles in the non-aqueous liquid.

Claim 11: Cancelled

Claim 12: Cancelled

13. (Currently Amended) The system of claim [[12]] 1 wherein the processing circuit receives a signal indicative of the water content from the water sensor.

14. (Currently Amended) The system of claim [[12]] 1 wherein the processing circuit receives a signal indicative of the particle count from the optical particle counter.

Claim 15: Cancelled

16. (Currently Amended) The system of claim [[15]] 1 wherein the processing circuit signals implications of the water content on the particle count in accordance with one or more threshold values related to the water content.

Claim 17: Cancelled

18. (Currently Amended) The system of claim [[15]] 1 wherein the processing circuit provides an indication of the particle count and an indication of the reliability of the particle count in accordance with the water content.

19. (Previously Presented) The system of claim 18 wherein the processing circuit provides an indication of the reliability of the particle count in accordance with one or more threshold values related to the water content.

Claim 20: Cancelled

21. (Currently Amended) The system of claim [[12]] 1 further comprising a valve arrangement coupled to the processing circuit.

22. (Currently Amended) ~~The A system of claim 21~~ for sampling a non-aqueous liquid comprising:

a water sensor capable of being coupled to a non-aqueous liquid to sense an indication of the water content of the non-aqueous liquid;

an optical particle counter capable of being coupled to the non-aqueous liquid to provide an indication of the number of particulates present in the non-aqueous liquid;

a processing circuit operatively coupled to at least one of the water sensor and the optical particle counter;

and

a valve arrangement coupled to the processing circuit, wherein the processing circuit and the valve arrangement are arranged to direct non-aqueous liquid away from the optical particle counter in accordance with the signal indicative of the water content.

23. (Previously Presented) The system of claim 22 further comprising a treatment unit coupled to the valve arrangement and arranged to decrease the water content in the non-aqueous liquid.

24. (Original) The system of claim 23 wherein the treatment unit includes an outlet coupled to the optical particle counter.

25. (Currently Amended) ~~The A system of claim 21 further comprising~~ for sampling a non-aqueous liquid comprising:

a water sensor capable of being coupled to a non-aqueous liquid to sense an indication of the water content of the non-aqueous liquid;

an optical particle counter capable of being coupled to the non-aqueous liquid to provide and indication of the number of particulates in the non-aqueous liquid;

a processing circuit operatively coupled to at least one of the water sensor and the optical particle counter;

a valve arrangement coupled to the processing circuit; and

a bypass line coupled to the valve arrangement and arranged to bypass the optical particle counter.

26. (Previously Presented) The system of claim 1 wherein the water sensor and the optical particle counter comprise an integral unit.

27. (Currently Amended) A method for sampling a non-aqueous liquid comprising:
directing the non-aqueous liquid into an optical particle counter and generating a signal indicative of the number of particles present in the non-aqueous liquid ~~and~~;
sensing the water content of the non-aqueous liquid ; and
providing an indication of the reliability of the number of particles counted by the optical particle counter in accordance with the sensed water content.

28. (Original) The method of claim 27 wherein the non-aqueous liquid is directed into the optical particle counter after sensing the water content of the non-aqueous liquid.

29. (Original) The method of claim 27 wherein the non-aqueous liquid is directed into the optical particle counter before sensing the water content of the non-aqueous liquid.

30. (Original) The method of claim 27 wherein the non-aqueous liquid is directed into the optical particle counter at substantially the same time as sensing the water content of the non-aqueous liquid.

Claims 31 and 32: Cancelled

Claim 33: Cancelled

Claims 34-36: Cancelled

37. (Original) A method for sampling a non-aqueous liquid comprising:
sensing an indication of the water content of the non-aqueous liquid; and
in response to the water content indication either (1) directing the non-aqueous liquid into an optical particle counter and generating a signal indicative of the number of particles in the non-aqueous liquid or (2) directing the non-aqueous liquid away from the optical particle counter.

38. (Original) The method of any of claim 37 wherein directing the non-aqueous liquid away from the optical particle counter includes directing the non-aqueous liquid into a treatment unit which decreases the water content of the non-aqueous liquid.

39. (Original) The method of claim 38 further comprising directing the non-aqueous liquid from the treatment unit into an optical particle counter.

40. (Previously Presented) The method of claim 37 wherein directing the non-aqueous liquid away from the optical particle counter includes bypassing the optical particle counter.

41. (Previously Presented) The method of claim 37 wherein directing the non-aqueous liquid away from the optical particle counter includes directing the non-aqueous liquid into a particulate indicator.

42. (Original) The method of claim 41 wherein directing the non-aqueous liquid into a particulate indicator includes passing the non-aqueous liquid through a porous medium and sensing a characteristic of non-aqueous liquid flow through the porous medium.

43. (Original) The method of claim 42 wherein sensing a characteristic of non-aqueous liquid flow through the porous medium includes sensing the pressure differential across the porous medium.

44. (Previously Presented) The method of claim 37 wherein sensing an indication of the water content includes sensing an indication of the relative saturation water content of the non-aqueous liquid.

45. (Previously Presented) The method of claim 37 wherein sensing an indication of the water content includes sensing an indication of the absolute water content of the non-aqueous liquid.

This listing of claims replaces all prior versions, and listings, of claims in the application.